

NEW! Advanced Manufacturing and Automation Micro-credential Programs

- Program Codes:** 7074, 7075, 7076, 7077 and 7078
- Length:** Hydraulic Fundamentals/Pneumatic Fundamentals: 40 hours each
Advanced Hydraulics/Pneumatics/Electrical and Electronics: 50 hours each
- Location:** Progress Campus
- Contact:** Engtech.pt@centennialcollege.ca or call 416-289-5000, ext. 52188

These micro-credentials contain the skills-based training that the Manufacturing and Automation industry is looking for, delivered in a condensed format. This training comes with access to state-of-the-art equipment and labs for experiential learning, which was developed in collaboration with the Canadian Fluid Power Association. These programs will help you expand your career, and enhance your knowledge base.

Gain Specialized Training in the following Fundamental Micro-Credentials (MC):

REGISTER NOW

HYDRAULIC FUNDAMENTALS MC 1

7074

40 hours online training: 3 hours/week virtual teacher-led and 2 hours/week independent study – 5 hours/week for 8 weeks

- Recognize and use industrial catalogues
- Gain Hydraulic fundamentals and theory
- Gain elements and fundamentals of Hydraulics and specify components to meet various loads and motions
- Explore functions of Hydraulic system components (pumps, valves, cylinders, motors) and symbols
- Calculate and select Hydraulic system components, read and create Hydraulic circuits and schematics
- Apply Hydraulic system safety
- Understand fluid conditioning, emphasizing contamination control
- Explore Hydraulic simulation software

REGISTER NOW

PNEUMATIC FUNDAMENTALS MC 2

7075

40 hours online training: 3 hours/week virtual teacher-led and 2 hours/week independent study – 5 hours/week for 8 weeks

- Recognize and use industrial catalogues
- Gain Pneumatics fundamentals and understanding of functions of Pneumatics system components (compressors, valves, cylinders, reservoirs, filters, lubricator, etc.) and symbols
- Calculate and select Pneumatic system components
- Read and create Pneumatic circuits
- Apply Pneumatic system safety
- Analyze loads and motion
- Interpret Pneumatic schematics,
- Analyze and troubleshoot Pneumatic systems

COMING SOON

ADVANCED HYDRAULICS MC 3

7076

50 hours of hybrid training, including online and in person labs

- Size and select Hydraulic components including proportional/servo valves
- Analyze and troubleshoot Hydraulic systems
- Size and select components for Hydrostatic equipment
- Utilize software including Automation Studio for simulation and design
- Introduction to electronic controls

COMING SOON

ADVANCED PNEUMATICS MC 4

7077

50 hours of hybrid training, including online and in person labs

- Read, create and troubleshoot Pneumatic circuits
- Analyze Pneumatic safety circuits
- Use catalogues for selecting, designing and pricing
- Utilize software including Automation Studio for simulation and design
- Introduction to electronic controls

COMING SOON

ELECTRICAL/ELECTRONICS MC 5

7078

50 hours of Hybrid training, including online and in person labs

- Understand applications of electronic components used in fluid power
- Demonstrate working knowledge of sensors, relays, solenoids, servo valves and mechanical controls
- Design electrohydraulic systems
- Interpret, design and troubleshoot electro-hydraulic and electro-pneumatic circuits
- Introduction to SMART and new technology

Limited spaces available.

APPLY NOW!

Learn more and register at
centennialcollege.ca/micro-credentials

For each micro-credential, you will receive a Centennial College / CFPA Certificate of Achievement (upon course completion)

Who can participate in these Micro-credentials?

This project focuses on helping impacted workers develop new skills as advanced operators, and highlight these skills to employers facing workforce and/or skills shortages.

Admission Requirements

- Ontario Secondary School Diploma (OSSD), or General Education Development (GED), or equivalent; OR Mature Student Status (19 years or older)

Tuition

Non-Member: \$550.00

CFPA Pricing: \$450.00

Benefits

- Upon successful completion of a Micro-credential, learners will be awarded a Certificate of Achievement, and Industry digital badges where applicable

Career Outlook

- Service Technician
- Maintenance Technician
- Hydraulic Assembler
- Field Technician
- Sales – Fluid Power/Hydraulic System design

In Partnership with:



Canadian Fluid Power Association
Association canadienne d'énergie des fluides

